REMARKS

The examiner has rejected claims 1-25 under 35 USC 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors had possession of the invention at the time the application was filed. Applicants believe that the claims now meet the formal requirements of 35 USC 112, first paragraph. As a result applicants respectfully request the rejection be withdrawn.

The examiner has rejected claims 1-25 under 35 USC 112, second paragraph, as indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants believe that the claims now meet the formal requirements of 35 USC 112, second paragraph and request that the rejection be withdrawn.

Additionally, the examiner has rejected the application under 35 USC 103(a) under two rationales. First, the examiner has rejected claims 1-17 under 35 USC 103(a) as unpatentable over Goertz (US 4,801,460) in light of Ortega (US 4,837,032). The examiner argues that one of ordinary skill in the art would have been motivated to prepare the instant composition by combining the process as disclosed in Goertz with that of Ortega which the examiner argues discloses "water-soluble polymers or gel forming polymers of polyvinylpyrrolidone and cellulose derivatives such as hydroxypropylcellulose. (Office Action of June 18, 2002, p. 7, last full paragraph). The examiner believes that a prima facie case of obviousness has been met because, "it is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose...[T]he idea of combining them flows logically from their having

been individually taught in the prior art." *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). (Office Action of June 18, 2002, pp. 7-8).

However, in light of the references cited by the examiner and the rationale supplied, applicants believe that the examiner has failed to establish a *prima facie* case of obviousness. Three requirements must be met in order for a *prima facie* case of obviousness must be made. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined must teach or suggest all the claim limitations). MPEP §2143.

With respect to the instant invention, the references do not teach or suggest all of the claim limitations. The '460 patent specifically discloses that the "polymeric binder must soften or melt in the total mixture of all components" so that the melt can be extruded. (Column 2, lines 25-30). In contrast, the instant invention claims a process and oral dosage forms (claims 1 and 17) wherein a mixture of polyvinyl acetate and polyvinylpyrrolidone act as both a binder and as matrix former for the sustained release being formed after tabletting. This process is carried out utilizing the process of granulation which does not require the presence of melt. The low glass transition temperature of polyvinyl acetate results in the surface becoming tacky at 35°C resulting in the granulation effect. Page 5, lines 6-20.

The '032 patent discloses sustained release tablets for theophylline formulated by wet granulating of a mixture of theophylline and the acid insoluble polymer. In contrast, this process does not involve an additional solvent. (p. 1, lines 29-34). Thus,

the instant invention incurs process times that are distinctly shorter and avoids the complication of organic solvents when using water-sensitive active ingredients. (Page 1, lines 34-39).

Additionally, under 35 USC 103(a) the examiner has rejected claims 17-25 over Noda (US 5,389,380) and Goertz (the '460 patent). The examiner argues that Goertz teaches that vinylpyrrolidone is a polymer and that Noda teaches a mixture of N-vinylpyrrolidone and vinyl acetate with theophylline or with analgesic or vitamin. Office action dated June 7, 2002, pp 8-9. With respect to these references the examiner has failed to establish a *prima facie* case of obviousness.

As discussed above, the Goertz patent discloses a process that requires complete melting of the polymeric binder.

Noda discloses a sustained release pharmaceutical preparation which is comprised of a carrier, an effective ingredient layer containing a medicinal compound and a coating layer for controlling dissolution of the medicinal compound. The rapid release core is prepared by spreading a mixture containing a medicinal compound, a heat-meltable material as a binder and, if necessary, one or more non-heat-meltable material to a carrier at a temperature at which the heat-meltable material can melt. Column 3, lines 30-35.

In contrast to the references cited above, the instant invention does not involve an addition of a solvent or binder solution. The granulation effect occurs because of the low glass transition temperature (T_g) of polyvinyl acetate. Thus, no melt is present in the granulation. (Page 5, lines 10-12). Citing references which merely indicate that isolated elements and/or features recited in the claims are known is not a sufficient basis for concluding that the combination of claimed elements would have been

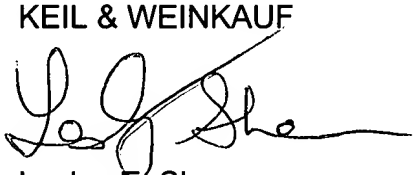
obvious. *Ex parte Hiyamizu*, 10 USPQ 2d 1393 BPAI (1988). Accordingly, the combination of Noda and Goertz do not teach each element of the claimed invention. Thus, the examiner has not established a prima facie case of obviousness.

A check in the amount of $110.00 is attached to cover the required one month extension fee.

Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees to Deposit Account No. 11-0345. Please credit any excess fees to such deposit account.

Respectfully submitted,

KEIL & WEINKAUF



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. (amended) A process for producing an oral dosage form with sustained release of active ingredient, comprising

a) a formulated mixture of polyvinyl acetate and polyvinylpyrrolidone

b) at least one active ingredient

c) [where appropriate] optionally water-soluble polymers or low or high molecular weight lipophilic additives

d) and, [where appropriate] optionally, other [conventional] excipients,

wherein the mixture of a) to d) or a) to c) or a) and b) and d) or a) and b) is granulated by heating to from 40[%] ° C to 130[%] ° C.

2. (amended) A process as claimed in claim 1, wherein the polyvinyl acetate to polyvinylpyrrolidone ratio is 6:4 to 9:1.

3. (amended) A process as claimed in claim 1, wherein the active ingredient : [release-slowing agent] water-soluble polymers or low or high molecular weight lipophilic additives ratio employed in the combination is from 5:95 to 85:15.

7. (amended) A process as claimed in claim 1, wherein the [conventional] excipients employed are fillers, disintegrants and adsorbents, lubricants, flowability agents, dyes, stabilizers, antioxidants, wetting agents, preservatives, release agents, flavorings or sweeteners.

8. (amended) A process as claimed in claim 1, wherein fillers [such as] are selected from the group consisting of lactose, cellulose powder, mannitol, calcium

diphosphate [or] and starch are employed as excipients.

10. (amended) A process as claimed in claim 1, wherein production is possible both continuously [and] or batchwise.

11. (amended) A process as claimed in claim 1, wherein further processing of the granules, principally the forced screening, can take place both in the hot state [and] or in the cooled state.

12. (amended) A process as claimed in claim 1, wherein besides the formulated mixture of polyvinyl acetate and polyvinylpyrrolidone, [it is possible to employ] further release-sustaining excipients may optionally be employed before, during or after the granulation.

14. (amended) A process as claimed in claim 1, wherein the water-soluble [highly swelling substances] polymers employed are alginates, pectins, galactomannans, carrageenans, dextran, curdlan, pullulan, gellan, chitin, gelatin, xanthans, hemicelluloses, cellulose derivatives [such as] are selected from the group consisting of methylcellulose, hydroxypropylmethylcellulose, hydroxypropylcellulose, hydroxyethylcellulose and carboxymethylcellulose[,] ; starch derivatives [such as] selected from the group consisting of carboxymethylstarch, degraded starch, maltodextrins, polyacrylic acid, polymethacrylic acid, acrylic acid/methacrylic acid copolymers, polyvinyl alcohols, high molecular weight polyethylene glycols, polyoxyethylene/polyoxypropylene block copolymers[,] and high molecular weight polyvinylpyrrolidones [and

derivatives thereof].

15. (amended) A process as claimed in claim 1, wherein the lipophilic substances employed are fatty alcohols [such as] consisting of stearyl alcohol; fatty acids [such as] selected from the group consisting of stearic acid, glycerides, fatty acid esters and fatty alcohol esters[,]; lipophilic polymers [such as] selected from the group consisting of ethylcellulose, cellulose acetate, acrylic ester/methacrylic ester copolymers, methacrylic acid/acrylic ester copolymers, cellulose acetate phthalate, cellulose acetate succinate, hydroxypropylmethylcellulose acetate phthalate, and hydroxypropylmethylcellulose acetate succinate [and derivatives thereof].

16. (amended) A process as claimed in claim 1, wherein the water-soluble polymers are selected from the group consisting of: polyvinyl alcohols, polyethylene glycols, polyoxyethylene/polyoxypropylene block copolymers, polyvinylpyrrolidones [and derivatives], vinyl acetate/vinyl pyrrolidone copolymers, [preferably] polyethylene glycols, polyvinylpyrrolidones, vinyl acetate/vinylpyrrolidone copolymers or maltodextrins, and salts thereof.

17. (amended) An oral dosage form comprising

a) a formulated mixture of polyvinyl acetate and polyvinylpyrrolidone

b) at least on active ingredient

c) [where appropriate] optionally water-soluble polymers or low or high molecular weight lipophilic additives

d) and, [where appropriate] optionally, other [conventicnal] excipients, wherein the mixture of a) to d) or a) to c) or a) and b) and d) or a) and b) is granulated by heating to from 40[%]° to 130°C.

19. (amended) An oral dosage form as claimed in claim [17] 18, which comprises active pharmaceutical ingredients as active ingredients.

20. (amended) An oral dosage form as claimed in claim [17] 18, wherein the active pharmaceutical ingredient is selected from the group consisting of benzodiazepines, antihypertensives, vitamins, cytostatics, anesthetics, neuroleptics, antidepressants, antibiotics, antimycotics, fungicides, chemotherapeutics, urologicals, platelet aggregation inhibitors, sulfonamides, spasmolytics, hormones, immunoglobulins, sera, thyroid therapeutics, psychopharmaceuticals, antiparkinson agents and other antihyperkinetics, ophthalmologicals, neuropathy products, calcium metabolism regulators, muscle relaxants, lipid-lowering agents, liver therapeutics, coronary agents, cardiac agents, immunotherapeutics, regulator peptides and their inhibitors, hypnotics, sedatives gynecologicals, antigout agents, fibrinolytics, enzyme products and transport proteins, enzyme inhibitors, emetics, perfusion promoters, diuretics, diagnostics, corticoids, cholinergics, biliary therapeutics, antiasthmatics, bronchospasmolytics, beta-receptor blockers, calcium channel blockers, ACE inhibitors, arteriosclerosis remedies, antiinflammatory agents, anticoagulants, antihypotensives, antihypoglycemics, antifibrinolytics, antiepileptics, antiemetics,

antidotes, antidiabetics, antiarrhythmics, antianemics, antiallergics, anthelmintics, analgesics, analeptics, aldosterone antagonists[,] and weight-reducing agents.

24. (amended) The [use of] method of using the oral dosage forms as claimed in claim 17 for producing drug products with delayed release of active ingredient.

25. (amended) The [use of] method of using the oral dosage forms as claimed in claim 17 for the delayed release of active ingredients in the form of food supplements or additives, vitamins, minerals or trace elements.